	Type	Hits	Search Text	DBs	Time Stamp
1	BRS	28719	electro-phoretic$ or electrophoretic$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:52
2	BRS	330620	ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:50
3	BRS	143261	encapsulat$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:50
4	BRS	850	(electro-phoretic$ or electrophoretic$) and ink and encapsulat$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:51
5	BRS	395343	binder$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:52
6	BRS	508	((electro-phoretic$ or electrophoretic$) and ink and encapsulat$) and binder$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:52
7	BRS	164	(electro-phoretic$ or electrophoretic$) near3 ink$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:53
8	BRS	38	(((electro-phoretic$ or electrophoretic$) and ink and encapsulat$) and binder$) and ((electro-phoretic$ or electrophoretic$) near3 ink$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/02 15:53

09/413,444

	Document ID	1	Source	Issue Date	Pages	Title	Current OR	Current XRef
1	US 20010045934 A1	☒	US-PGPUB	2001 1129	22	Printable electronic display	345/107	
2	US 6262706 B1	☒	USPAT	2001 0717	32	Retroreflective electrophoretic displays and materials for making the same	345/107	204/606; 257/E27.111; 257/E27.117; 257/E51.006; 257/E51.041; 257/E51.047; 257/E51.049; 345/85; 349/86; 359/296
3	US 20020021270 A1	☒	US-PGPUB	2002 0221	9	Bistable electro-optic desplay, and method for addressing same	345/84	345/204
4	US 6392786 B1	☒	USPAT	2002 0521	16	Electrophoretic medium provided with spacers	359/296	204/606; 345/107
5	US 6392785 B1	☒	USPAT	2002 0521	33	Non-spherical cavity electrophoretic displays and materials for making the same	359/296	204/487; 204/600; 264/4; 264/8; 345/107; 427/213.3

	Document ID	1	Source	Issue Date	Pages	Title	Current OR	Current XRef
6	US 6323989 B1	☒	USPAT	2001 1127	26	Electrophoretic displays using nanoparticles	359/296	345/107
7	US 6262833 B1	☒	USPAT	2001 0717	27	Capsules for electrophoretic displays and methods for making the same	359/296	204/456 ; 204/606 ; 264/4; 345/107
8	US 6312304 B1	☒	USPAT	2001 1106	21	Assembly of microencapsulated electronic displays	445/24	313/506

US 20020055461A1

(19) **United States**

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(54) **STABLE POLYMER AQUEOUS/AQUEOUS EMULSION SYSTEM AND USES THEREOF**

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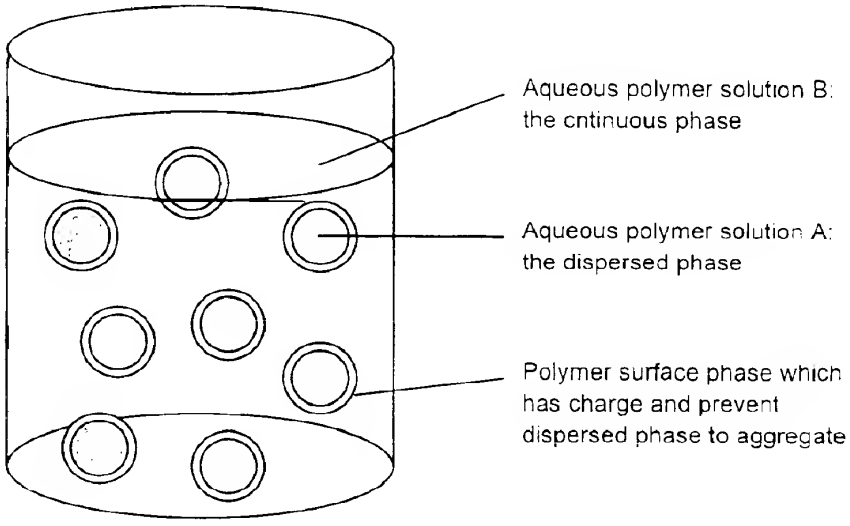
(52) **U.S. Cl.** **514/2**; 264/4.1, 424/491

(57) **ABSTRACT**

This invention provides a stable aqueous/aqueous emulsion system which is prepared with a hydrophilic polymer. This invention also provides the method of preparing a stable aqueous/aqueous emulsion. Finally, this invention provides an encapsulation comprising the emulsion system which is prepared with a hydrophilic polymer.



Polymer solution A and polymer solution B are immiscible, thus A can be dispersed into B under a shear stress. The third polymer carries charge and is fairly immiscible with both A and B at low concentration, so that it tends to be rich at the interface of A and B, and forms a charged surface. The charged surface effectively prevent aggregation and fusion of the dispersed phase (See *Example 1* in the paragraph). Therapeutic agents such as proteins, liposomes and viruses are partitioned and encapsulated in the dispersed phase and subjected to lyophlization (See *Examples 2, 3 and 4*).

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	164	(electro-phoretic$ or electrophoretic$) near3 ink$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 17:34
2	BRS	L2	143411	encapsulat$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 17:34
3	BRS	L3	1910824	binder$ or fluid$2 or suspension$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 17:36
4	BRS	L4	38	(((electro-phoretic$ or electrophoretic$) and ink and encapsulat$) and binder$) and ((electro-phoretic$ or electrophoretic$) near3 ink$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 17:42
5	BRS	L5	126	1 not 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 18:06

	Type	L #	Hits	Search Text	DBs	Time Stamp
6	BRS	L6	506	359/296;345/107.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 18:07
7	BRS	L7	1196500	@pd>=20020301	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 18:08
8	BRS	L8	81	6 and 7	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 18:08
9	BRS	L9	5336	430/32-35,58.8,19;264/4-4.7;252/586;428/402.2-402.24.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 18:08
10	BRS	L10	166	7 and 9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/03 18:08

	Type	L #	Hits	Search Text	DBs	Time Stamp
11	BRS	L1 1	240	8 or 10	USPAT; US-PGPU B; EPO; JPO; DERWENT ; IBM_TDB	2002/ 12/03 18:19
12	BRS	L1 2	234	11 not 5	USPAT; US-PGPU B; EPO; JPO; DERWENT ; IBM_TDB	2002/ 12/03 18:19
13	BRS	L1 3	219	11 not 1	USPAT; US-PGPU B; EPO; JPO; DERWENT ; IBM_TDB	2002/ 12/03 18:19
14	BRS	L1 4	219	13 not 4	USPAT; US-PGPU B; EPO; JPO; DERWENT ; IBM_TDB	2002/ 12/03 18:19